

## NONPROVISIONAL PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OLIFF & BERRIDGE, PLC  
P.O. Box 19928  
Alexandria, Virginia 22320  
Telephone: (703) 836-6400  
Facsimile: (703) 836-2787

Attorney Docket No.: 101846

Date: October 28, 1998

## BOX PATENT APPLICATION

NONPROVISIONAL APPLICATION TRANSMITTAL  
RULE §1.53(b)

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Transmitted herewith for filing under 37 C.F.R. §1.53(b) is the nonprovisional patent application

For (Title): IMPROVEMENTS IN OR RELATING TO A BLADE TIP CLEARANCE SYSTEMBy (Inventors): Julian Glyn BALSDON and Sean Alan WALTERS

- ☒ Formal drawings (Figs. 1-4; 2 sheets) are attached.  
☒ A Declaration and Power of Attorney is filed herewith.  
☒ An assignment of the invention to ROLLS-ROYCE PLC is filed herewith.  
☐ An Information Disclosure Statement is filed herewith.  
☐ A statement to establish small entity status under 37 C.F.R. §§1.9 and 1.27 is filed herewith.  
☐ A Preliminary Amendment is filed herewith.  
☐ Please amend the specification by inserting before the first line the sentence --This nonprovisional application claims the benefit of U.S. Provisional Application No. \_\_\_\_\_, filed \_\_\_\_\_.--  
☒ Priority of foreign application(s) No. 9725623.4 filed December 3, 1997 in Great Britain is claimed (35 U.S.C. §119).  
☒ A certified copy of the above corresponding foreign application(s) is filed herewith.  
☒ The filing fee is calculated below:

CLAIMS IN THE APPLICATION AFTER ENTRY OF  
ANY PRELIMINARY AMENDMENT NOTED ABOVE

FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	10 - 20	= ---*
INDEP CLAIMS	1 - 3	= ---*
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS PRESENTED		

\* If the difference is less than zero, enter "0".

## SMALL ENTITY

RATE	FEE
	\$ 380
x 9 =	\$
x 39 =	\$
+130 =	\$
TOTAL	\$

OR

OR

OR

OR

OR

OR

OTHER THAN A  
SMALL ENTITY

RATE	FEE
	\$ 760
x 18	\$---
x 78	\$---
+260	\$---
TOTAL	\$760

- ☒ Check No. 62085 in the amount of \$760.00 to cover the filing fee is attached. Except as otherwise noted herein, the Commissioner is hereby authorized to charge any other fees that may be required to complete this filing, or to credit any overpayment, to Deposit Account No. 15-0461. Two duplicate copies of this sheet are attached.

- ☐ This application is entitled to small entity status. DO NOT charge large entity fees to our Deposit Account.

Respectfully submitted,

*James A. Oliff*  
James A. Oliff  
Registration No. 27,075

Joel S. Armstrong  
Registration No. 36,430

65705 U.S. PTO  
09/184402  
10/28/98

98 OCT 28 PM 2:23  
RECEIVED  
U.S. PATENT & TRADEMARK OFFICE

Unclassified When  
DetachedUnclassified When  
Detached

101846

Cl. 60

AW 3641

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

## RECEIPT FOR APPLICATION PAPERS DEPOSITED WITH LICENSING AND REVIEW BRANCH

10/28/98

65705 U.S. PTO  
09/184402

Title:

**IMPROVEMENTS IN OR RELATING TO A BLADE TIP CLEARANCE SYSTEM**

NAME OF INVENTOR(S)

RESIDENCE(S)

CITIZENSHIP

**BALSDON ET AL**

NUMBER OF CLAIMS

10

SHEETS OF DRAWINGS

2

FOREIGN FILING DATE

COUNTRY

NAME AND ADDRESS OF ATTORNEY

Filing Date: 28-Oct-98

REMARKS:

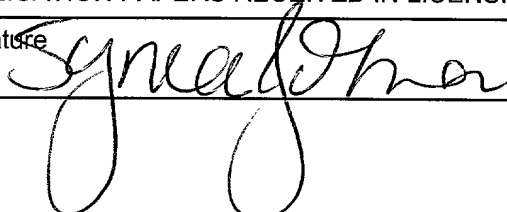
1.101/\$790.00 (check no.COP-62085)

2.581/\$40.00 (check no.COP-62086)

DECLARATION

APPLICATION PAPERS RECEIVED IN LICENSING AND REVIEW BRANCH

Signature



Date:

10/28/98

09/184402

**DECLARATION AND POWER OF ATTORNEY  
FOR APPLICATION FOR UNITED STATES PATENT**

As a below named inventor, I hereby declare that:

my residence, post office address and citizenship are as stated below under my name;

I verily believe I am the original, first and sole (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

IMPROVEMENTS IN OR RELATING TO A BLADE TIP CLEARANCE SYSTEM

described and claimed in the specification:

**Check one**

\*a ☒ attached hereto

b ☐ filed on \_\_\_\_\_ as Application Serial No \_\_\_\_\_

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations §1.56. Under Title 35, US Code §119, the priority benefits of the following foreign application(s) filed within one year prior to this application are hereby claimed:

GREAT BRITAIN PATENT APPLICATION NO 9725623.4  
FILED 3 DECEMBER 1997

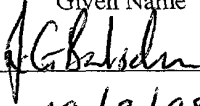
The following application(s) for patent or inventor's certificate on this invention were filed in countries foreign to the United States of America either (a) more than one year prior to this application, or (b) before the filing date of the above-named foreign priority application(s):

I hereby appoint the following as my attorneys of record with full power of substitution and revocation to prosecute this application and to transact all business in the Patent Office:

**James A Oliff, Reg No 27,075; William P Berridge, Reg No 30,024;  
Kirk M Hudson, Reg No 27,562; Thomas J Pardini, Reg No 30,411; and  
Edward P Walker, Reg No 31,450; Robert A Miller, Reg No 32,771 and  
Mario A Costantino, Reg No 33,565**

**ALL CORRESPONDENCE IN CONNECTION WITH THIS APPLICATION SHOULD BE SENT TO OLIFF & BERRIDGE PLC, PO BOX 19928, ALEXANDRIA, VIRGINIA 22320, TELEPHONE (703) 836-6400.**

I hereby declare that I have reviewed and understand the contents of this Declaration, and that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

1	Typewritten Full Name of Sole or First Inventor	<u>JULIAN</u> Given Name	<u>G</u> Middle Initial	<u>BALSDON</u> Family Name
2	Inventor's Signature			
3	Date of Signature	<u>19/8/98</u>		
	Residence	<u>BRISTOL</u> City	<u>GREAT BRITAIN</u> State or Province	<u>GREAT BRITAIN</u> Country
	Citizenship	<u>BRITISH</u>		
	Post Office Address	<u>24 ANSON CLOSE, SALTFOURD, BRISTOL BS31 3DY, GREAT BRITAIN</u>		

\*If Box a is checked, this form may be executed only when attached to the specification (including claims) at the end thereof.  
Note to Inventor: Please sign name on line 2 exactly as it appears in line 1 and insert the actual date of signing on line 3.

IF THERE IS MORE THAN ONE INVENTOR USE PAGE 2 AND PLACE AN "X" HERE ☒

(Discard this page in a sole inventor application)

1 Typewritten Full Name  
of Joint Inventor SEAN A WALTERS  
Given Name Middle Initial Family Name

2 Inventor's Signature *[Signature]* 19/8/98

3 Date of Signature 19/8/98

Residence BRISTOL GREAT BRITAIN  
City State or Province Country

Citizenship BRITISH

Post Office Address 4 NEWENT AVENUE, KINGSWOOD, BRISTOL BS15 2AQ, GREAT BRITAIN

1 Typewritten Full Name  
of Joint Inventor \_\_\_\_\_  
Given Name Middle Initial Family Name

2 Inventor's Signature \_\_\_\_\_

3 Date of Signature \_\_\_\_\_

Residence \_\_\_\_\_  
City State or Province Country

Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

1 Typewritten Full Name  
of Joint Inventor \_\_\_\_\_  
Given Name Middle Initial Family Name

2 Inventor's Signature \_\_\_\_\_

3 Date of Signature \_\_\_\_\_

Residence \_\_\_\_\_  
City State or Province Country

Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

1 Typewritten Full Name  
of Joint Inventor \_\_\_\_\_  
Given Name Middle Initial Family Name

2 Inventor's Signature \_\_\_\_\_

3 Date of Signature \_\_\_\_\_

Residence \_\_\_\_\_  
City State or Province Country

Citizenship \_\_\_\_\_

Post Office Address \_\_\_\_\_

**Note to Inventor:** Please sign name on line 2 exactly as it appears in line 1 and insert the actual date of signing on line 3.

**This form may be executed only when attached to the first page of the Declaration and Power of Attorney of the applications to which it pertains.**